## Project: IH635 LBJ Freeway, Section 4 - West Phase II Geotechnical Investigation - Proposed Boring Locations

	Boring	Approximate Station (ft)	Projected Depth/Length(ft)	Hole Orientation	Current Excavation Zone	Reason for Boring	Category*
1	2BW4L	80+75	70	Vertical	Cut & Cover	Stratigraphy; identify bearing stratum; fill in grid	1
2	2BW10L	105+30	50	Vertical	Cut & Cover	Stratigraphy; identify bearing stratum; fill in grid	1
3	2BW12L	113+50	45	Vertical	Cut & Cover	Stratigraphy; identify bearing stratum; fill in grid	1
4	2BW13R	117+70	55	Vertical	Cut & Cover	Stratigraphy; identify bearing stratum; fill in grid	1
5	2BW14R	121+75	50	Vertical	Cut & Cover	Stratigraphy; identify bearing stratum; fill in grid	1
6	2BW16L	130+00	50	Vertical	Cut & Cover	Stratigraphy; identify bearing stratum; fill in grid	1
7	2BW17R	134+00	45	Vertical	Cut & Cover	Stratigraphy; identify bearing stratum; fill in grid	1
8	2BW18L	138+00	45	Vertical	Cut & Cover	Stratigraphy; identify bearing stratum; fill in grid	1
9	2BW19R	142+30	50	Vertical	Cut & Cover	Stratigraphy; identify bearing stratum; fill in grid	1
10	2BW22L	154+60	55	Vertical	Cut & Cover	Stratigraphy; identify bearing stratum; fill in grid	1
11	2BW23R	158+75	45	Vertical	Cut & Cover	Stratigraphy; identify bearing stratum; fill in grid	1
12	2BW26L	171+00	50	Vertical	Cut & Cover	Stratigraphy; identify bearing stratum; fill in grid	1
13	2BW29L	183+25	85	Vertical	Cut & Cover	Stratigraphy; locate EFS in order to analyze extending mined tunnel to the west; fill in grid	1
14	2BW29R	183+25	85	Vertical	Cut & Cover	Stratigraphy; locate EFS in order to analyze extending mined tunnel to the west; fill in grid	1
15	2BW30R	187+40	90	Vertical	Cut & Cover	Stratigraphy; locate EFS in order to analyze extending mined tunnel to the west; fill in grid	1
16	2T1L	194+75	135	45 deg East	Portal	Evaluate fracture frequency at potential western portal location	2
17	2T3L	197+50	125	Vertical	C&C or Tunnel	Stratigraphy; locate EFS in order to analyze extending mined tunnel to the west	1
18	2T5L	204+00	115	Vertical	C&C or Tunnel	Stratigraphy; locate EFS in order to analyze extending mined tunnel to the west; fill in grid	1
19	2T6aR	208+00	35	Vertical	C&C or Tunnel	Adjacent to T6R - to install piezometer to assess groundwater in overburden	1
20	2T7R	212+00	115	Vertical	C&C or Tunnel	Stratigraphy; locate EFS in order to analyze extending mined tunnel to the west; fill in grid	1
21	2T8L	216+10	125	Vertical	C&C or Tunnel	Stratigraphy; locate EFS in order to analyze extending mined tunnel to the west; fill in grid	1
22	2T8aL	219+53	90	45 deg East	Portal	Fracture frequency through potential WB mined tunnel portal - delete if western portal confirmed	2
23	2T9R	220+30	135	Vertical	Cut & Cover	Stratigraphy; locate EFS in order to analyze extending mined tunnel to the west; fill in grid	1
24	2T10L	225+50	120	Vertical	Tunnel	Evaluate to tunnel grade for deeper tunnel alternative; further define bentonite marker bed	2
25	2T10aR	226+15	85	45 deg East	Tunnel/Portal	Fracture frequency through potential EB mined tunnel portal	2
26	2T11R	228+60	120	Vertical	Tunnel	Stratigraphy; further define bentonite marker bed; fill in grid	1
27	2T19aC	259+50	130	Vertical	Tunnel	Further define bentonite marker bed; evaluate deeper tunnel alt.	2
28	2T20L	261+78	150	45 deg East	Tunnel	Define faulting; further define bentonite marker bed	2
29	2T20R	264+00	150	Vertical	Tunnel	Define faulting; further define bentonite marker bed; locate EFS;	1
30	2T21aC	267+00	130	Vertical	Tunnel	Define faulting; further define bentonite marker bed	1
31	2T21R	269+15	150	45 deg West	Tunnel	Define faulting; further define bentonite marker bed	2
32	2T22aC	271+00	130	Vertical	Tunnel	Define faulting; further define bentonite marker bed	1
33	2T23aL	275+50	110	Vertical	Tunnel	Identify fault margin; further define bentonite marker bed	1
34	2T31L	306+50	125	Vertical	Tunnel	Evaluate deeper tunnel alternative; further define bentonite marker bed and second bentonite bed	2
35	2T31R	307+00	120	Vertical	Tunnel	Evaluate deeper tunnel alternative; further define bentonite marker bed and second bentonite bed	2
36	2T33R	314+00	120	Vertical	Tunnel	Evaluate deeper tunnel alternative; further define bentonite marker bed and second bentonite bed	2
37	2T34L	317+50	120	Vertical	Tunnel	Evaluate deeper tunnel alternative; further define bentonite marker bed and second bentonite bed	2
38	2T35L	320+00	150	45 deg West	Tunnel/Portal	Fracture frequency through WB mined tunnel portal	2
39	2T35R	320+00	150	45 deg West	Tunnel/Portal	Fracture frequency through WB mined tunnel portal	2
40	2T36R	331+00	100	Vertical	Tunnel	Evaluate potential eastward extension of mined tunnel	2
41	2T36L	334+00	100	45 deg West	Tunnel/Portal	Fracture frequency through mined tunnel portal for potential eastward extension - WB tunnel	2

<sup>\*</sup> Category Description

Borings that should be drilled now and that will assist in future PcE team decisions.

<sup>2.</sup> Borings that require discussion among PcE team members. Plan to confirm plans for these by 12/10/2004